## Department of Health and Hospitals

State of Louisiana

## Naegleria fowleri in Animals

Naegleria fowleri infections have been experimentally induced in mice (the usual animal model for studying the disease), guinea pigs and sheep. There have been reported cases in a South American tapir (1990s) and in cattle (2005, 2012). The consensus of scientific thought is that animals are susceptible, however cases, or at least reported cases are extremely rare. There are also likely species differences in susceptibility.

In cattle and in the tapir, the source of the ameba was warm, untreated surface water. Of course tapirs live in water and cows often consume surface water that may be stagnant and is often untreated.

It also is likely that the disease, although rare, occurs in other species, but is underreported. Human encephalitis is often undiagnosed, so it stands to reason that some animal cases occur, but are never identified.

There have been no animal cases of *Naegleria fowleri* reported from the state of Louisiana over the past decade. Although infection with the agent is possible in pet species, infections are EXTREMELY rare, and certainly merit no additional preventive recommendations other than those listed below:

- Never intentionally spray or infuse water of any kind up the nose of an animal.
- Provide a supply of clean, fresh water to your pets at all times and change the water a minimum of two times daily.
- Keep water bowls as clean as possible (as clean as your own tableware).
- Scrub away any type of scum or film that may form on water bowls.
- Pets should be prevented from drinking stagnant water
- It is natural for dogs to recreate in surface water. The incidence of free living ameba infections in dogs is so low, that there is no reason to limit this type of activity, although caretakers of animals that enjoy this type of recreation should take certain precautions:
  - Dogs may have physical conditions that make swimming difficult. Dogs with health problems, especially heart and lung problems, or that are obese may have difficulty swimming.
  - Never allow a dog to swim unsupervised.
  - Some dogs are slow to "learn" to swim, and all dogs should be introduced to the water slowly.
  - O If a dog appears to struggle after introduction to the water, remove the animal or assist the animal in exiting the body of water.
    - Signs of struggle include...
      - The dog's head going underwater
      - Anxious facial expressions
      - Excessive panting
  - o Always bathe or at least rinse off your dog after the dog swims. This procedure can prevent skin infections.

Information provided by state public health veterinarian, Dr. Gary Balsamo, Louisiana Department of Health and Hospitals.